

### **REMARKS/ARGUMENTS**

This application has been reviewed in light of the Final Office Action mailed on September 3, 2009. Claims 1-23, and 26-28 are pending in the application with Claims 6 and 9-20 being previously withdrawn from consideration and with Claims 1 and 21-23 being in independent form. Claims 1 and 21-23 have been amended by the present amendment. Claims 24, 25 and 29 have been cancelled by the present amendment. No new matter has been added. In view of the amendments and remarks to follow, reconsideration and allowance of this application are respectfully requested.

#### **Claim Objections**

In the Office Action, Claim 22 was objected to due to a typographical error. Claim 22 has been amended herein to correct this error. Accordingly, the objection to Claim 22 has been overcome and Applicants respectfully request withdrawal of this objection.

#### **Claim Rejections – 35 U.S.C. §103(a)**

In the Office Action, Claims 1-3, 8 and 21-29 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,770,072 to Truckai et al. ("Truckai") in view of U.S. Patent No. 5,810,811 to Yates et al. ("Yates"). It was asserted that Truckai teaches all of the features of Claim 1, with the exception of "the offsetting of the electrodes when the jaw are closed on tissue." Claims 24, 25 and 29 have been cancelled herein, thus rendering the rejection to those claims moot.

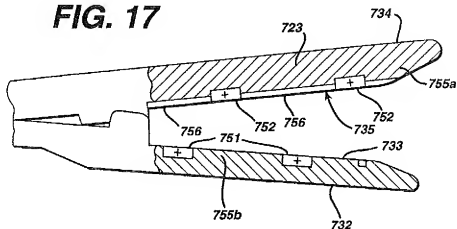
Claim 1 requires a tissue or vessel sealing instrument comprising, *inter alia*, "the elastomeric material of the first jaw member completely surrounding a first electrode associated therewith, the elastomeric material of the second jaw member completely surrounding a second electrode associated therewith, each of the electrodes including a planar tissue-contacting surface disposed transverse to the longitudinal axis, the first electrode and the second electrode being offset a distance X relative to one another, wherein the distance X is transverse to the longitudinal axis, such that when the jaw members are closed about the tissue and when the electrodes are activated, electrosurgical energy flows through the tissue in a generally coplanar manner relative to tissue contacting surfaces and generally transverse to the longitudinal axis."

The Examiner relied on Yates to teach "the electrode members offset along the length of the jaw members to provide a current flow that is coplanar with the jaw contacting surfaces." The Examiner concluded that it would have been obvious to provide the arrangement of electrodes taught in Yates on the device disclosed in Truckai.

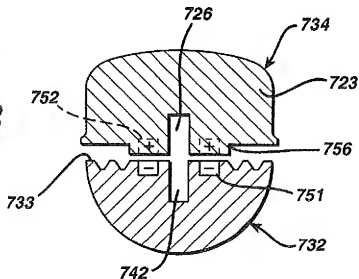
More particularly, the Examiner relied on Figures 17 and 18 of Yates, reproduced below, to "show an embodiment where it is preferable to provide the electrode members offset along the length of the jaw members to provide a current flow that is coplanar with the jaw contacting surfaces." As shown in FIG. 17, the electrodes are longitudinally offset from each other. Applicants have noted that the embodiment in FIGS. 17 and 18 is inconsistent between figures, as in FIG. 17 there are only positive electrodes on the a first lateral side of the first jaw member and the second jaw

member, but in FIG. 18, each lateral side of each jaw member includes positive and negative electrodes.

**FIG. 17**



**FIG. 18**



However, even assuming arguendo that each of Figures 17 and 18 is accurate, neither figure illustrates "the elastomeric material of the first jaw member completely surrounding a first electrode associated therewith, the elastomeric material of the

second jaw member completely surrounding a second electrode associated therewith, each of the electrodes including a planar tissue-contacting surface disposed transverse to the longitudinal axis, the first electrode and the second electrode being offset a distance X relative to one another, wherein the distance X is transverse to the longitudinal axis, such that when the jaw members are closed about the tissue and when the electrodes are activated, electrosurgical energy flows through the tissue in a generally coplanar manner relative to tissue contacting surfaces and generally transverse to the longitudinal axis," as required by Claim 1.

More particularly, in Yates, upon activation of the electrodes, energy does not flow from a first electrode on a first jaw member to a second electrode on a second jaw member through the tissue transversely with respect to the longitudinal axis. Rather, the energy would flow from a first electrode of a first jaw member, along the longitudinal axis, to the second electrode of the second jaw member (see FIG. 18).

Accordingly, for at least these reasons, Applicants respectfully submit that Claim 1 is allowable under 35 U.S.C. §103(a) over Truckai in view of Yates. Since Claims 2, 3, 8 and 26-29 depend from Claim 1 and contain all of the limitations of Claim 1, Applicants respectfully submit that each of Claims 2, 3, 8 and 26-29 is allowable under 35 U.S.C. §103(a) over Truckai in view of Yates.

Additionally, Claim 1 has been amended to include the limitations of previously-pending Claim 25. Specifically, Claim 1 requires, *inter alia*, "the elastomeric material of the first jaw member completely surrounding a first electrode associated therewith, the elastomeric material of the second jaw member completely surrounding a second electrode associated therewith." In the Office Action, with regard to Claim 25, it was

asserted that Truckai clearly shows "the elastomeric material encompassing the electrode ***leaving only an exposed electrode surface flush with the elastomeric material***" (emphasis added). Thus, since the disclosed electrode of Truckai includes an exposed surface, Truckai clearly does not teach, disclose or even remotely suggest that the elastomeric material ***completely surrounds*** its respective electrode. For at least this additional reason, Claim 1 is allowable under 35 U.S.C. §103(a) over Truckai in view of Yates.

With regard to Claim 21, Claim 21 requires a tissue or vessel sealing instrument wherein, *inter alia*, "electrosurgical energy flows through the tissue in a generally coplanar manner relative to the tissue contacting surfaces and transversely perpendicular to the longitudinal axis." Yates was relied on to teach the direction of energy flow through tissue. However, Yates does not disclose energy flowing through tissue in a manner that is "transversely perpendicular to the longitudinal axis," as required by Claim 21. (See Figures 17 and 18, reproduced above.) For at least this reason, Claim 21 is allowable under 35 U.S.C. §103(a) over Truckai in view of Yates.

Additionally, Claim 21 has been amended herein to include the limitations of previously-pending Claim 25. Specifically, Claim 21 requires, *inter alia*, "each of the elastomeric materials completely surrounding an electrode therein." In the Office Action, it was asserted that Truckai clearly shows "the elastomeric material encompassing the electrode ***leaving only an exposed electrode surface flush with the elastomeric material***" (emphasis added). Thus, since the disclosed electrode of Truckai includes an exposed surface, Truckai clearly does not teach, disclose or even remotely suggest that the elastomeric material ***completely surrounds*** its respective

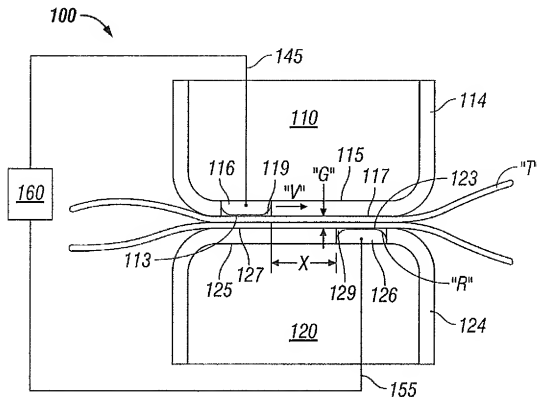
electrode. For at least this additional reason, Claim 21 is allowable under 35 U.S.C. §103(a) over Truckai in view of Yates.

With regard to Claim 23, Claim 23 requires a tissue or vessel sealing instrument comprising, *inter alia*, "the electrodes being substantially longitudinally aligned and being offset a distance X relative to one another such that when the jaw members are closed about the tissue and when the electrodes are activated, electrosurgical energy flows through the tissue in a generally coplanar manner relative to the tissue contacting surfaces." Yates was relied on to teach the positioning of the electrodes. However, Yates does not disclose "the electrodes being substantially longitudinally aligned and being offset a distance X relative to one another." For at least this reason, Claim 23 is allowable under 35 U.S.C. §103(a) over Truckai in view of Yates.

Additionally, Claim 23 has been amended herein to include the limitations of previously-pending Claim 25. Specifically, Claim 23 requires, *inter alia*, "each of the elastomeric materials completely surrounding an electrode therein." In the Office Action, it was asserted that Truckai clearly shows "the elastomeric material encompassing the electrode ***leaving only an exposed electrode surface flush with the elastomeric material***" (emphasis added). Thus, since the disclosed electrode of Truckai includes an exposed surface, Truckai clearly does not teach, disclose or even remotely suggest that the elastomeric material ***completely surrounds*** its respective electrode. For at least this additional reason, Claim 23 is allowable under 35 U.S.C. §103(a) over Truckai in view of Yates.

With regard to Claim 22, Claim 22 requires a tissue or vessel sealing instrument comprising, *inter alia*, "each of the elastomeric materials including a pocket disposed

therein, and each pocket including an electrode disposed therein." An example of the pockets 119, 129 is illustrated in FIG. 2 of Applicants' disclosure, reproduced below.



Additionally, Claim 22 has been amended herein to further define the direction of electrosurgical energy flow. In particular, Claim 22 now requires, *inter alia*, "electrosurgical energy flows through the tissue in a generally coplanar and uni-directional manner relative to the tissue contacting surfaces." This feature is not taught or disclosed by Yates or Truckai. For at least these reasons, Claim 22 is allowable under 35 U.S.C. §103(a) over Truckai in view of Yates.

In the Office Action, Claim 1-5, 7, 8 and 21-27 were rejected under 35 U.S.C. §103(a) as being unpatentable over Yates in view of U.S. Patent No. 6,932,816 to Phan

("Phan"). Claims 24 and 25 have been cancelled herein, thus rendering the rejection to those claims moot. Phan was relied on to teach "that it is advantageous to provide the jaw member with an elastomeric material (106) made from silicone or silicone polymers."

Phan fails to disclose any offset electrodes or elastomeric materials that **completely surround** their respective electrode. For at least these reasons, Claim 1 is allowable under 35 U.S.C. §103(a) over Yates in view of Phan. Accordingly, since Claims 2-5, 7, 8 and 26-27 depend from Claim 1 and contain all of the limitations of Claim 1, each of Claims 2-5, 7, 8 and 26-27 is allowable under 35 U.S.C. §103(a) over Yates in view of Phan.

With regard to Claim 21, Claim 21 requires a tissue or vessel sealing instrument wherein, *inter alia*, "electrosurgical energy flows through the tissue in a generally coplanar manner relative to the tissue contacting surfaces and transversely perpendicular to the longitudinal axis." As discussed above, Yates does not disclose energy flowing through tissue in a manner that is "transversely perpendicular to the longitudinal axis," as required by Claim 21. Additionally, Phan fails to disclose this feature. Further, both Yates and Phan fail to disclose elastomeric materials that **completely surround** their respective electrode. For at least these reasons, Claim 21 is allowable under 35 U.S.C. §103(a) over Yates in view of Phan.

With regard to Claim 23, Claim 23 requires a tissue or vessel sealing instrument comprising, *inter alia*, "the electrodes being substantially longitudinally aligned and being offset a distance X relative to one another such that when the jaw members are closed about the tissue and when the electrodes are activated, electrosurgical energy



flows through the tissue in a generally coplanar manner relative to the tissue contacting surfaces.” As discussed above, Yates does not disclose “the electrodes being substantially longitudinally aligned and being offset a distance X relative to one another.” Additionally, Phan fails to disclose any offset electrodes. Further, neither Yates nor Phan discloses elastomeric materials that ***completely surround*** their respective electrode. For at least these reasons, Claim 23 is allowable under 35 U.S.C. §103(a) over Yates in view of Phan.

With regard to Claim 22, Claim 22 has been amended herein such that it requires a tissue or vessel sealing instrument comprising, *inter alia*, “electrosurgical energy flows through the tissue in a generally coplanar and uni-directional manner relative to the tissue contacting surfaces.” This feature is not taught or disclosed by Yates or Phan. For at least this reason, Claim 22 is allowable under 35 U.S.C. §103(a) over Yates in view of Phan.

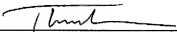
**CONCLUSION**

In view of the foregoing, it is respectfully submitted that all claims presently pending in the application, namely Claims 1-5, 7-8, 21-23, and 26-28, are in condition for allowance.

If the Examiner should have any questions concerning this communication or feels that an interview would be helpful, the Examiner is requested to call the Applicants' undersigned attorney at the Examiner's convenience.

Please charge any deficiency as well as any other fee(s) that may become due under 37 C.F.R. § 1.16 and/or 1.17 at any time during the pendency of this application, or credit any overpayment of such fee(s), to Deposit Account No. 50-5016.

Respectfully submitted,

  
\_\_\_\_\_  
Thomas A. Beaton  
Reg. No. 46,543  
Attorney for Applicants

**Correspondence address:**  
Chief Patent Counsel  
Covidien  
60 Middletown Avenue  
North Haven, CT 06473  
(303) 581-6831